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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/981,608

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Thomas E. Tahan

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EXAMINER

BILGRAMI, ASGHAR H

ART UNIT

PAPER NUMBER

2143

MAIL DATE

DELIVERY MODE

05/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/981,608

Applicant(s)

TAHAN, THOMAS E.

Examiner

Asghar Bilgrami

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-15, 17-23, 25-31 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-15, 17-23, 25-31 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 10, 18 & 26 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not define what constitutes a "Community Set" (CS). The specification also does not define whether the "Community Set " in an OCS, ACS, UCS is the same or different in each category and if it is different then how is the community set different in ACS vs OCS.

Additionally the specification describes the mathematical definition of a "set", "superset" and a "subset" on page 9 but fails to define the applicability of the these terms in the current invention in relation with the OCS, ACS and UCS to enable one in the ordinary skill in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

2. The first paragraph of 35 USC 112 requires that the "specification shall contain a written description of the invention...". (MPEP 2163)

The specification does not disclose and define in detail what constitutes ACS, the relationship between the ACS and the application process such that one in the ordinary skill in the art would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application filed.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 10, 18 & 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. All independent claims state, "(UCS) of said user is a superset of an object community set" and "ACS of said process is a superset of an OCS of said object". It is not clear how can a UCS of a user can be a "superset" of object community set (OCS) and ACS of said process is a superset of an OCS of said object making the claim language is indefinite. Applicant is advised to clarify and incorporate what makes UCS the superset of OCS in the claimed invention. Similarly what makes ACS of said process the superset of OCS in the claimed invention.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 9-15, 17-23, 25-31 & 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (U.S. 5,265,221) and Belani et al (U.S. 6,772,350)

6. As per claims 1, 10, 18 & 26 Miller disclosed a computer system comprising: a Multi-community Node (MCN) comprises: a community information base (CIB), wherein said CIB (col.2, lines 42-47) includes: a user community set (UCS) for each user of said MCN (col.2, lines 47-52); an application community set (ACS) for each application on said MCN; and an object set (OCS) (col.1, lines 30-35) for each object residing within said MCN (col.2, lines 52-62); a processing unit configured to receive a request for access to an object; consult said CIB responsive to said request; permit access to said object in response to detecting said request is from a user; and a UCS of said user is a superset of an object community set (OCS) of said object (col.4, lines 56-67 & col.5, lines 1-20); permit access to said object in response to detecting: said request is from a process; and an ACS said process is a superset of said OCS (col.5, lines 39-62). However Miller did not explicitly disclose a computer network coupled to the Multi-community node (MCN).

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In the same field of endeavor Belani disclosed a computer network; and a multi-community node (MCN) coupled to said computer network (col.4, lines 34-38).

At the time the invention was made it would have been obvious to one in the ordinary skill in the art to incorporate a connection to computer network as disclosed by Belani to a computer system of Miller in order to make the computer system more versatile and scalable by having multiple clients/users connect to the system from various locations.

7. As per claims 2, 11, 19 & 27 Miller-Belani disclosed the method of claim 1, wherein said object is an operating system controlled resource (Miller, col.1, lines 30-34 & col.2, lines 23-27).

8. As per claims 3, 12, 20 & 28 Miller-Belani disclosed the method of claim 2, wherein said object is selected from the group consisting of a file system, a storage volume, a directory, a file, a record, a memory region, a queue, a pipe, a socket, a port, or an input/output device (col.1, lines 30-34).

9. As per claims 4, 13, 21 & 29 Miller-Belani disclosed the method of claim 1, wherein the initial owner of said object is the creator of said object (Miller, col.5, lines 39-62).

10. As per claims 5, 14, 22 & 30 Miller-Belani disclosed the method of claim 1, further comprising permitting an owner of said object to designate a first user as a new

owner of said object, in response to detecting a UCS of said first user is a superset of said OCS (Miller, col.5, lines 39-62).

11. As per claims 6, 15, 23 & 31 Miller-Belani disclosed the method of claim 1, further comprising allowing a first process to change said OCS of said object to a subset of said ACS of said first process, in response to detecting an owner of said first process is an owner of said object and said ACS is a superset of said OCS (Miller, col.5, lines 39-62).

12. As per claims 9, 17, 25 & 34 Miller-Belani disclosed the method of claim 8, wherein said CIB further includes a creator and a current owner for each object residing within said MCN (Miller, col.5, lines 39-62).

### ***Response to Arguments***

13. Applicant's arguments filed 10/17/2005 have been fully considered but they are not persuasive.

14. Applicant argued that the prior art does not teach the limitations in the current independent claims.

15. Since the applicant has used specific terminologies in the claims, the examiner in order to clarify the rejection and interpretation of the claims has shown these terminologies as defined by the applicant in the specification.

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Community Information Base (CIB) = Maintains associations between objects, users and processes (Page.5 of applicant's specification).

User Community Set (UCS) = each user has a UCS which may be configured by a trusted administrator into a database of user profiles (page.25, lines 11-12).

Object Community set (OCS) = Object may include file systems, storage volumes, directories, files, memory regions, queues, pipes, sockets, input/output devices, or other operating system controlled resources. Associated with each object is an OCS. Objects are generally created by processes running on behalf of users. The objects' creator is a user or user role on whose behalf the process that creates an object is running. In addition to a creator, each object has an owner. An object's owner may initially be the user who created the object. The owner may assign another user as owner. A user may become an object owner if that user's UCS includes the OCS of the object. An object's OCS is initially set by its creator (via a process running on behalf of the creator) and must be included within the UCS of its creator and within the ACS of the process, which created it (page.25, lines 17-26 of applicant's specification).

Application Community set (ACS) = each application process has an ACS. An application process' ACS is initially set by the user who invoked it and may default to the UCS of the invoker (page.25 of applicant's specification).



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16. Claim interpretation:

A computer system comprising: a Multi-community Node (MCN) comprises: a community information base (CIB) wherein said CIB (col.2, lines 32-47) { Miller describes access control mechanisms, that grant, revoke any deny authorization to entities allowing easy implementation of separation of duties I.E it has an association table or matrix through with it can determine which entity has what level of access} includes: a user community set (UCS) for each user of said MCN (col.2, lines 47-52) { Miller further elaborates on the access mechanism by disclosing a matrix that contains user attributes pertaining to each user A.K.A rules names with their associated Boolean expressions} also discloses that ; an application community set (ACS) for each application on said MCN; and an object set (OCS) for each object (Please read col.1, lines 30-35 and compare it with the definition of an object in the specification) residing within said MCN (col.2, lines 52-62); a processing unit configured to receive a request for access to an object; consult said CIB responsive to said request; permit access to said object in response to detecting said request is from a user; and a UCS of said user is a superset of an object community set (OCS) of said object (col.4, lines 56-67 & col.5, lines 1-20) { Miller discloses that security policies are concerned not only with which subject may obtain access to which objects, but also with the granting, revoking and denying of authorizations to and from users and groups. Given the set of authorizations for users and groups, some rules must be applied for deriving authorization for subjects. In general case, user may belong to more than one group. In assigning privileges to subjects acting on behalf of a user, one can choose to: 1. Have the subject operate with the union of privileges of all groups (Superset) to which the user belongs, as well as all

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his or her individual privileges. 2. Have the subject operate with the privilege of only one group at a time; 3. Allow the subject to choose to operate with its user's privileges or with the privileges of one of the groups to which its user belongs; and implement some other policy}; permit access to said object in response to detecting: said request is from a process; and an ACS said process is a superset of said OCS (col.5, lines 30-35 & 39-62) {Miller also discloses that user's access rights are also application dependent and the owner or multiple owner may have rights to delete and modify an object I.E in order to perform such actions the user has to access the object by a certain process that originally created that object}.

17. Additionally applicant is advised that When reviewing a reference the applicants should remember that not only the specific teachings of a reference but also reasonable inferences which the artisan would have logically drawn therefrom may be properly evaluated in formulating a rejection. In re Preda, 401 F. 2d 825, 159 USPQ 342 (CCPA 1968) and In re Shepard, 319 F. 2d 194, 138 USPQ 148 (CCPA 1963). Skill in the art is presumed. In re Sovish, 769 F. 2d 738, 226 USPQ 771 (Fed. Cir. 1985). Furthermore, artisans must be presumed to know something about the art apart from what the references disclose. In re Jacoby, 309 F. 2d 513, 135 USPQ 317 (CCPA 1962). The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969). Every reference relies to some extent on knowledge of persons skilled in the art to complement that is disclosed therein. In re Bode, 550 F. 2d 656, 193 USPQ 12 (CCPA 1977).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3924. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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